

THE CLAIMS

A complete listing of all of Claims 1 – 27 is provided below.

1. (Currently Amended) A method for variably handling, by a multiple interface naming proxy operating upon a machine executing a remote access server (RAS) server connected to multiple subnet links via distinct network interfaces, a network resource name service request received on a RAS interface to facilitate rendering a corresponding network address of a resource residing on a subnet one or more subnets coupled to the machine via an interface linked to a local area network (LAN), the method comprising the steps of:

first receiving, by the multiple interface naming proxy via the RAS interface, the network resource name service request;

first transmitting to at least one of the one or more subnets, via at least the interface linked to the LAN, a name query request corresponding to the network resource name service request; and

second receiving in response to the first transmitting step, by the machine via the interface linked to the LAN, a name query response including a network address for the resource residing on the subnet at least one of the one or more subnets coupled to the machine via the interface linked to the LAN.

2. (Currently Amended) The method of claim 1, wherein the multiple interface naming proxy maintains a cache of name-to-address entries, and the method further comprising comprises the step of:

determining, by the multiple interface naming proxy in response to the first receiving step, that the cache does not contain an entry corresponding to a name identified in the name service request.

3 - 5. (Canceled)

6. (Currently Amended) The method of claim 1 further comprising the steps of: accessing, by the RAS server, the network address received by the machine during the second receiving step; and

establishing, by the RAS server on behalf of the RAS client, a connection between the RAS server and the resource residing on at least one of the subnet one or more subnets coupled to the machine via the interface linked to the LAN.

7. (Previously Presented) The method of claim 1 further comprising the step of: transmitting the network address via the RAS interface to a RAS client.

8. (Original) The method of claim 1 wherein the network address is an internet protocol (IP) address.

9. (Previously Presented) The method of claim 1 wherein the RAS interface and interface linked to the LAN are linked to distinct LANs.

10. (Currently Amended) A computer-readable medium having computer-executable instructions for facilitating variable handling, by a multiple interface naming proxy operating upon a machine executing a remote access server (RAS) server connected to multiple subnet links via distinct network interfaces, a network resource name service request received on a RAS interface to facilitate rendering a corresponding network address of a resource residing on a at least one subnet coupled to the machine via an interface

linked to a local area network (LAN), the computer-readable medium having computer-executable instructions facilitating performing the steps of:

first receiving, by the multiple interface naming proxy via the RAS interface, the network resource name service request;

first transmitting to at least one subnet, via at least the interface linked to the LAN, a name query request corresponding to the network resource name service request; and

second receiving in response to the first transmitting step, by the machine via the interface linked to the LAN, a name query response including a network address for the resource residing on the at least one subnet coupled to the machine via the interface linked to the LAN.

11. (Currently Amended) The computer-readable medium of claim 10, wherein the multiple interface naming proxy maintains a cache of name-to-address entries, and the computer-readable medium further comprising computer-readable instructions facilitating performing the step of:

determining, by the multiple interface naming proxy in response to the first receiving step, that the cache does not contain an entry corresponding to a name identified in the name service request.

12. (Canceled)

13. (Canceled)

14. (Currently Amended) The computer-readable medium of claim 10, further comprising computer-executable instructions for performing the step of:

accessing, by a RAS server, the network address received by the machine during the second receiving step; and

establishing, by the RAS server on behalf of a RAS client, a connection between the RAS server and the resource residing on the at least one subnet coupled to the machine via the interface linked to the LAN.

15. (Previously Presented) The computer-readable medium of claim 10 further comprising computer executable instructions for facilitating performing the step of:

transmitting the network address via the first RAS interface to a RAS client.

16. (Original) The computer-readable medium of claim 10 wherein the network address is an internet protocol (IP) address.

17. (Previously Presented) The computer-readable medium of claim 10 wherein the computer-executable instructions facilitate performing the first receiving, first transmitting, second receiving steps on the machine having the RAS interface and the interface linked to the LAN linking the machine to distinct LANs.

18. (Currently Amended) A network server machine providing name services for variably responding to network resource name service requests from connected clients residing upon multiple distinct sub-nets, the network server machine comprising:

a first network adaptor, associated with a RAS interface, coupled to a first sub-net including a naming service client;

a second network adaptor linked to a local area network (LAN) including a resource having a resource name and an associated network address;

a set of stored computer-executable instructions for a RAS server, by the network server machine, the steps of:

first receiving, by the multiple interface naming proxy via the first network adaptor, the network resource name service request;

first transmitting to at least one of the distinct sub-nets, via at least the second network adaptor, a name query request corresponding to the network resource name service request; and

listening for, in response to the first transmitting step, by the machine via the second network interface, a name query response including a network address for the resource residing on at least one of the subnet distinct sub-nets coupled to the machine via the second network interface.

19. (Original) The network server machine of claim 18 wherein the multiple interface naming proxy maintains a cache of name-to-address entries, and further comprises computer-executable instructions for facilitating performing the step of:

determining, by the multiple interface naming proxy in response to the first receiving step, that the cache does not contain an entry corresponding to a name identified in the name service request.

20 - 22. (Canceled)

23. (Currently Amended) The network server machine of claim 18 further comprising computer-executable instructions facilitating performing the steps of:

accessing, by the RAS server, the network address received by the machine during the second receiving step; and

establishing, by the RAS server on behalf of the RAS client, a connection between the RAS server and the resource residing on at least one of the subnet distinct subnets coupled to the machine via the second network interface.

24. (Currently Amended) The network server machine of claim 20 18 further comprising computer-executable instructions facilitating performing the step of:
transmitting the network address via the first network interface to a RAS client.

25. (Original) The network server machine of claim 18 wherein the network address is an internet protocol (IP) address.

26. (Previously Presented) The network server machine of claim 18 wherein the first network adaptor and second network adaptor are linked to distinct LANs.

27. (Currently Amended) A method for variably handling, by a multiple interface naming proxy operating upon a router connected to multiple subnet links via distinct network interfaces, the method comprising:

receiving a resource name from a computer connected to a first one of the subnet links;

resolving the resource name; and

variably rendering a corresponding network address for a resource corresponding to the resource name residing on a second of the subnet links coupled to the router via a second subnet interface.